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ORIGINAL

Application No. 10/047,817

Fourth Declaration Under 37 C.F.R. § 1.132
of Richard A. Brown

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Patent Application No. 10/047,817

Applicant: Brown

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FOURTH DECLARATION UNDER 37 C.F.R. § 1.132 OF RICHARD A. BROWN

Sir:

I, Richard A. Brown, hereby declare the following:

1. I am currently the Director of Research and Development of Cosmetic Laboratories of America and have held this title for ten years. I have been employed with Cosmetic Laboratories of America for the past twenty years. I have over 35 years of experience in the area of personal care products, with extensive experience in research and development of skin care and hair care products, in particular.

2. I received a Bachelor's Degree in Chemistry in 1970 and a Master's Degree in Business Administration in 1977, both from the University of California at Los Angeles.

3. I am the named inventor in the present application. In some embodiments, the present invention relates to a pigmented cosmetic composition comprising a water-in-oil emulsion, in which the emulsion comprises (a) from about 30% to about 40% by weight of an oil phase; (b) from about 30% to about 50% by weight of an aqueous phase; (c) from about 5%

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to about 15% by weight of a pigment; (d) from about 3% to about 6% by weight of a cetyl dimethicone copolyol emulsifier; and (e) a separation inhibitor comprising a silicone elastomer, wherein the silicone elastomer comprises a dimethicone cross-polymer, and wherein said silicone elastomer is present in an amount of from about 0.1% to about 7% by weight of said composition, wherein the composition is stable for at least three months at about 50 °C. In another embodiment, the present invention relates to a particulate sunscreen composition comprising a water-in-oil emulsion, said emulsion comprising (a) from about 30% to about 40% by weight of an oil phase; (b) from about 30% to about 50% by weight of an aqueous phase; (c) from about 1% to about 35% by weight of a particulate sunscreensing agent; (d) from about 3% to about 6% by weight of a cetyl dimethicone copolyol emulsifier; and (e) a separation inhibitor comprising a silicone elastomer, wherein the silicone elastomer comprises a dimethicone cross-polymer, and wherein said silicone elastomer is present in an amount of from about 0.1% to about 7% by weight of said composition, wherein the composition is stable for at least three months at about 50 °C.

4. Inventive experiments summarized in First, Second, and Third Declarations are compiled in Attachment A. The experiments involved preparing and evaluating the stability of 8 water-in-oil emulsions (Example 1 in the instant application and Samples A-G). Example 1 of the instant application is an inventive example comprising 4 wt% cetyl dimethicone copolyol. Samples A and B are comparative examples and contain 1 and 8 wt%, respectively, of cetyl dimethicone copolyol. Samples C, D, E, F, and G are inventive and contain 3, 6, 4, 4, and 6 wt%, respectively, of cetyl dimethicone copolyol and illustrate the breadth of the invention. The amounts of oil, water, pigment, elastomer, and other components listed in Example 1 of the instant application vary among Samples C-G. See Attachment A.

5. All of the samples were prepared and observed for stability at 50 °C. Each of Example 1 of the instant application and Samples C, D, E, F, and G remained stable at 50 °C for at least 3 months after preparation. In contrast, comparative Sample B was unstable after only a few days after its preparation. The water and oil phases separated from one another completely. Comparative Sample A initially was stable, but after about one and a half months, the sample underwent a "creaming" process, in which the composition separated into thick creamy phase on

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top and a thinner layer on the bottom. As such, comparative Sample A was not considered a stable emulsion.

6. The results demonstrate that only a composition of the present invention (particularly, a composition comprising about 3-6 wt% cetyl dimethicone copolyol) was stable for at least three months at 50 °C. The increase in stability exhibited by a composition of the present invention is surprisingly greater than compositions comprising an amount less than or greater than about 3-6 wt% of cetyl dimethicone copolyol.

7. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under § 1001 of Title 18 of the United States Code, and that such willful, false statements may jeopardize the validity of the application or any patent issued thereon.

August 7, 2006
Date

Richard A. Brown
Richard A. Brown

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ATTACHMENT A

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Ingredients	Example 1		A		B		C		D		E		F		G	
	Inventive 4%	Comparative 1%	Inventive 4%	Comparative 1%	Inventive 8%	Comparative 8%	Inventive 3%	Comparative 3%	Inventive 4%	Comparative 4%	Inventive 4%	Comparative 4%	Inventive 6%	Comparative 6%	Inventive 6%	Comparative 6%
MITCH HAZEL EO2	45.9870	45.9865	45.9870	45.9865	45.9870	45.9865	45.9870	45.9865	45.9870	45.9865	45.9870	45.9865	45.9870	45.9865	45.9870	45.9865
DC SILICONE 9040	10.0000	10.0000	10.0000	10.0000	10.0000	10.0000	10.0000	10.0000	10.0000	10.0000	10.0000	10.0000	10.0000	10.0000	10.0000	10.0000
CYCLOMETHICONE (10054) DC 345 FLUID	7.0000	7.0000	7.0000	7.0000	7.0000	7.0000	7.0000	7.0000	7.0000	7.0000	7.0000	7.0000	7.0000	7.0000	7.0000	7.0000
CYCLOMETHICONE SF 1202	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000
OCTYL METHOXYCINNAMATE (PARSOL MCX)	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000
CETYL DIMETHICONE COPOLYOL (ABIL WE-06)	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
BUTYLENE GLYCOL	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000
BENTONE GEL V55 CP	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000
DC 556 FLUID	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000
GEL BASE SIL	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000
OCTYL SALICYLATE	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000
NYLON 12 (LPO)	1.8000	1.8000	1.8000	1.8000	1.8000	1.8000	1.8000	1.8000	1.8000	1.8000	1.8000	1.8000	1.8000	1.8000	1.8000	1.8000
SODIUM CHLORIDE	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
PHENOXETHANOL	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000
METHYL PARABEN	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000
P.O. FRAGRANCE HY-147	0.1000	0.1000	0.1000	0.1000	0.1000	0.1000	0.1000	0.1000	0.1000	0.1000	0.1000	0.1000	0.1000	0.1000	0.1000	0.1000
PROPYL PARABEN	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500
DISODIUM EDTA	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500
VITAMIN A PALMITATE	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010
VITAMIN E ACETATE	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010
BY-OSC	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010
ALOE EXTRACT	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100
TITANIUM DIOXIDE S12 (R2434)	7.0000	7.0000	7.0000	7.0000	7.0000	7.0000	7.0000	7.0000	7.0000	7.0000	7.0000	7.0000	7.0000	7.0000	7.0000	7.0000
YELLOW IRON OXIDE S12	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
RED IRON OXIDE S12	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000
BLACK IRON OXIDE S12	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000
	100.0000	100.0000	100.0000	100.0000	100.0000	100.0000	100.0000	100.0000	100.0000	100.0000	100.0000	100.0000	100.0000	100.0000	100.0000	100.0000

Emulsifier 3-6%	4	1	8	3	4	6	6
Oil Phase 30-40%	34	35	32	34	40	33	40
Aqueous Phase 30-50%	50	51	48	50	41	49	30
Pigment Phase 5-15%	8	9	8	8	8	8	15
Silicone Elastomer 0.1-7%	1	1	1	1	4	1	2
3 Months Stability @ 50°C	PASS	FAIL	FAIL	PASS	PASS	PASS	PASS